

Roundtable on Sustainable Biofuels

An initiative of the EPFL Energy Center



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Summary of the discussions about draft principles (Elements collected during the month of July 2007 and the second meeting of the Working Group on Environment-25th July 2007)

1. List of participants:

1.a Comments sent through emails, phone or the bioenergy wiki website:

Agenor Mundim	Debbie Hammel	Julie Robson	Riina Antikainen
Amin Assadolahi	Emily Lydgate	Kevin Fingermann	Sauman Das Gupta
Amrita Talapatra	Heidi Quante	Kirk Leonard	Zane Abdul
Ana-Maria Bravo-Angel	Jeff Jones	Mathelaci (wiki username)	
Arrigo della Gherardesca	Jeroen Douglas	Monica Romano	
Carmen Virasoro	Jonas Dallinger	Paloma Berenguer	

1.b Participants to the 2nd Virtual Meeting:

Alexandra Morel	Christoph Frei (RSB)	Kevin Fingerman	Nicolae Scarlat
Ana Maria Bravo Angel	Debbie Hammel	Kirk Leonard	Ruaraidh Petre
Arrigo Della Gherardesca	Erik Meidell	Kyle White	Sachin Kapila
Carlo Perreira	Francois Vuille	Lars Friberg	Sebastien Haye (RSB)
Charlotte Opal (RSB)	Jeff McNeely (chair)	Martina Otto	Tourane Corbiere (RSB)
Chris Dragisic	Justus von Geibler	Naomi Pena	

2. General Comments:

Many comments and opinions have been collected since the launching of the Working Group and in spite of technical problems at the beginning of the conference, this 2nd virtual meeting was held in generally **good conditions**. The **very useful inputs** that were collected will allow the RSB secretariat to rework the draft principles so that we can better fulfil the participants' expectations and concerns.

Based on some comments heard before, during and after the conference, it might be useful to clarify a few principles of the RSB:

- **The RSB does not aim to put pressure** on governments, companies, producers or any other stakeholders in the biofuel value chain in a political or activist way. The RSB **will not concretely lobby** in favour or against a particular practice, but simply provide a consensus view on the practice's sustainability, and help enable stakeholders to make their own decisions. **Every country, producer or company will remain absolutely free** of any interference to implement any available technology and the RSB's role will be **to advise whether the way the technology is being used appears sustainable** or not.

- In this first phase of the Roundtable’s work, the Steering Board of the RSB has made the deliberate **choice to cover only biofuels from vegetal sources to be used for transport**. Hence, questions about other sources and uses of bioenergy are not able to be addressed at this time.
- We must differentiate between **relative improvements** compared to fossil fuels (GHG performance, for instance) and **absolute objectives** (non-degradation of high conservation value - HCV – areas, for instance). The fact that such principles do not exist for fossil fuels cannot prevent us from being strict with biofuels if we are aiming for a truly “clean” alternative. However, we cannot create principles and criteria that are so demanding that they are impossible to achieve on a wide scale, or are so expensive to implement that they price biofuels entirely out of the market.
- Many participants expressed their wish to find a **positive rewording** of the principles. Although it is possible to reformulate some of them, one has to keep in mind that biofuels are currently developed for **four positive aspects**, namely (1) *the reduction of GHG emissions*, (2) *the decrease in exploitation of fossil resources*, (3) *increase in energy security*, and (4) *a new form of rural development that could improve local livelihoods in producing countries*. Apart from these positive impacts, several negative impacts are likely to occur, such as contamination, loss of biodiversity, etc. Even though initiatives like the RSB aim to mitigate these effects, this objective cannot forcefully be turned inversely to ensure a positive effect regarding them. In other words, **we have a clear idea about what biofuels “should” bring (reduction in GHG, energy security and/or rural development) and what biofuels “should not” bring (on the environmental side, loss of biodiversity/HCV areas and/or contamination of ecosystems)**. Rewording these concepts inversely seems inappropriate, since the motive of producing biofuels cannot reasonably be to improve soil quality, for instance, and if we are to achieve this specific objective, better ways are probably available.

Nevertheless, regarding biodiversity for instance, both formulations can be found in other initiatives:

- **RTFO (UK):** “Biomass production will not lead to the destruction or damaging of high biodiversity areas”
- **The Netherlands (Cramer Commission):** “Biomass production must not affect protected or vulnerable biodiversity and will, where possible, have to strengthen biodiversity.”
- **FSC:** Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.

3. Principle on GMOs/Biotechnologies/Technologies:

Various opinions were expressed regarding this point. Seeking to reflect the points that were brought to light during the discussion, **table 1** is a tentative synthesis of the possibilities, with positive/negative aspects and the RSB’s position regarding each proposition.

Formulation	Positive Aspects	Negative Aspects
1. “Leave as it is” <i>One principle about GMOs under the environmental category</i>	Transparency and precaution regarding GMOs, as a critical and emotional aspect	Unfair in relation to other technological aspects. Why highlight GMOs and not the other technologies?
2. <i>Include GMOs or technologies as a</i> critereon under the biodiversity (or HCV) principle	More precise, since a major threat of GMOs is upon biodiversity	Other possible risks (water/fertilizers/social) not considered + same remark as above
3. Expand the principle on GMOs <i>to all biotechnologies under the environmental category</i>	More fair, as every biotechnology could be included. Anticipation of future development	Impacts other than environmental and other damaging technologies not considered.
4. Expand the principle on GMOs <i>to all technologies under the environmental category</i>	Every type of technologies included + Same remark as for biotech	Impacts other than environmental not considered
5. Add a general principle about best practices and responsible use of technologies (under a separate category)	No subjective or emotional focus, every present and future damages covered.	Best practices have not been officially described for all technologies. Can be redundant with other principles to protect soil, water, air, etc.
6. Add a general principle about best practices (under a separate category)	Same remark as above with a wider coverage	Same remark. Very vague; difficult to list every possibility
7. <i>No principle about technologies, every risk covered by other principles</i>	Simplification, no overlap	Risk (and impression from outside) that some aspects are not considered enough.

Table 1: alternative formulation and organisation of a principle on technologies

4. Use of the term « Biofuel » instead of « Biomass » :

Most agreed to this proposition. One participant, however, considered that biofuel was too specific and that we should rather say “**biofuel value chain**”. Another pointed that by removing “biomass”, we were losing an opportunity to address every type of use, but the RSB Secretariat noted that at this stage the principles are intended to cover **liquid fuel for transport only**. Another participant emphasized that the RSB does not intend to address how local people use biomass. (Although RSB Secretariat notes that we can create a tool to help local communities, governments, etc... evaluate local projects).

5. Principle on Biodiversity/HCV Areas:

The proposition of the RSB to **extend the principle on biodiversity to any HCV areas** (since some areas are rare and valuable with low diversity as well) met **positive reactions** among the members of the Working Group, but several negative aspects were also pointed out, as summarized in **Table 2**.

Positive Aspects	Negative Aspects
<ul style="list-style-type: none"> - HCV areas cover an exhaustive range of valuable areas, including those of social and cultural importance as well and those providing ecosystem services - The term “HCV areas” is an official classification used in other initiatives such as the RTFO, FSC, RSPO...and supported by WWF and many other international institutions. 	<ul style="list-style-type: none"> - No mapping of HCV areas, hence this is rather a concept with the list of aspects to be taken into consideration. - Difficulties for smallholders and farmers to identify these areas. - Loss of national sovereignty and inequity as per past damages done by northern countries on their own land

Table 2: Pros and Cons of a principle on HCV areas

Keeping the constraints in mind, the RSB Secretariat will draft a recommended re-wording of the principle on HCV areas (HCV areas are rather a concept with precise indicators than an official numbering), while taking into consideration the challenge this represents for developing countries and small farmers. The criteria and the implementation phase shall then take this aspect into consideration by **providing a longer time and clear guidance to stakeholders to enable them to comply with this aspect. The right of each nation to define those areas for itself has to be clearly recognized as well.**

Additional comment received by email:

It suggests a specific reference to biological corridors, as these are many times not officially 'protected' areas, but they are a critical element for biodiversity conservation. And, they are one that can be specifically addressed in biofuel management.

Ex: “3) Biofuel production should not directly or indirectly lead to the destruction or degradation of areas of High Conservation Value (HCV), including areas of high biodiversity; **corridors linking areas of high biodiversity**; habitats of rare, threatened or

endangered species, rare, threatened or endangered ecosystems and areas providing basic environmental services.”

6. Principles on Soil, Water and Air:

Some participants were concerned with the **absolute aspect** of these principles and a major question is: should we keep the principles **aspirational and idealistic** (and then be more specific in the subsequent criteria) or **realistic and reasonable**. Several participants agreed on both positions, some arguing that the term “beyond acceptable levels” (ex: cannot raise water pollution above x ppm/local level/international norms) could be helpful and more realistic. Another suggestion is also to replace this aspect comparatively to the other food crops. Another interesting approach would also be to require the improvement of practices rather than set a specific level, but then where is the line of acceptable practice?

The following comment was also added on the bioenergy wiki:

“A key point to consider is preventing systematic irreversible destruction of natural processes and systems. Yes damage to natural processes is going to occur, but we should not be destabilizing natural balances such that we risk collapse. Examples could include destruction of rainforest canopy to such an extent that changes to micro-climate cause the remaining forest to die out.”

7. Timeline:

As some principles remain unclear, it is **not possible to give a definitive timeline** now. The main changes to be added to the original timeline are to put the Water question at the end of our work (outputs from UC Berkeley will be helpful by this time). As the question of a principle about GMOs/technologies and the principle on biodiversity/HCV areas remain under discussion, the next months are uncertain and the possibilities are:

- **Biodiversity/HCV areas** will be discussed during the months of August to October (but as we are delayed with the draft principles, this question is likely to be started in September). Depending on whether or not biotechnologies would be included under this principle, the time dedicated to it could be extended.
- **GMOs/biotech/technologies** could be dealt with from October to December unless the Working Group considers that their related issues are already covered by the other principles. Should technologies (best practices) become a general category of principles, it would not be the duty of the ENV WG only to set criteria under such a principle. In this case, the work on criteria could be left for the end of the process so that joint discussions can be set with the other Working Groups. One first activity by ENV WG might be to list potential risks of biotechnologies, and see if/how they are covered by other principles.

8. Tentative Synthesis:

Based on the timeline, our working group should have agreed on **a revised version of draft principles to submit to the Steering Board by mid September**. Over the next month, the participants are requested to **express their choice and opinions about the current**

alternatives, so that the Working Group can adopt a clear position. Regarding unsolved issues, the RSB secretariat will work on clear recommendations regarding the following points still in discussion: this proposal will be sent to the group by the second half of August. So far, the pending questions are:

- **Positive wording:** None? For some principles? For all principles?
- **GMOs/biotech/technologies:** Principle? Criterion? Category? Nothing?
- **Biofuel instead of biomass:** Almost agreed.
- **Biodiversity/HCV areas :** Agreed on expanding from biodiversity to a broader concept, but worried about definition/indicators
- **Soil, water and air:** aspirational or realistic? Fix a limit?
- **Timeline:** according to the points above.

By the **end of August**, each participant will receive a **proposal, which includes the requested adjustment**. A **telephone conference** will be organised on the 7th of September to formally validate a consensus on the draft principles, as long as the gap between the different opinions is not too wide. In such a case, the decision will belong to the Steering Board. In order to move forward according to our timeline, **we request all your attention and participation during the coming weeks so that everyone can take part in the decision**. Although it might be possible to reopen the discussion on draft principles later on, it is likely that the next steps of our work will make it difficult to do so.